## Curriculum Vita for Alan E. Gelfand Professor of Statistics

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DATE & PLACE OF BIRTH: April 17, 1945, New York City, New York

### EDUCATIONAL HISTORY:

B.S., City College of New York, 1965 M.S., Stanford University, 1967 Ph.D., Stanford University, 1969

# ACADEMIC EXPERIENCE:

1966-67	Summer Research Assistant, U.S. Navy Electronics Laboratory
1967-69	Graduate Teaching Assistant, Stanford University; Graduate Research Assistant, 1968-69
1969	Assistant Professor, University of Connecticut Associate Professor, 1975-80 Professor, 1980-
1970	Visiting Assistant Professor, Stanford University Summer
1971	Visiting Research Associate, Stanford University Summer
1972	Summer Research Associate, George Washington University
1976	Visiting Research Associate, Stanford University Summer
1978-79	Summer Research Associate, Stanford University
1980	Visiting Lecturer, University of New South Wales Visiting Lecturer, Sydney
	University; Visiting Research Scientist, CSIRO, Sydney
1985-93	Visiting Research Associate, Stanford University, Summers
1988;90	Science and Engineering Research Council Visiting Fellow, Nottingham University
1992;93;95	Science and Engineering Research Council Visiting Fellow, Imperial College
1995	Visiting Research Scholar, Harvard University
2001	Visiting Research Scientist, University of Washington
2002 -	Professor (James B. Duke Professor of Statistics and Decisions Sciences)
	Duke University
2002	Visiting Professor, Bocconi University, Milan
2004 05	Visiting Desearch Scholan, Oslo University

2004,05 Visiting Research Scholar, Oslo University

- 2005 Visiting Professor, University of Rome
- 2005 Professor of Environmental Health and Policy, Nicholas School of the Environment and Earth Sciences
- 2007 Chair, Department of Statistical Science

## **PROFESSIONAL SOCIETIES:**

American Statistical Association; Institute of Mathematical Statistics; International Statistical Institute (Bernoulli Society); International Society for Bayesian Analysis

#### HONORS OR DISTINCTIONS:

Elected Fellow of the American Statistical Association, May 1978 Elected Member of the International Statistical Institute, 1986 Elected Member of the Connecticut Academy of Arts and Sciences, April 1995 Elected Fellow of the Institute of Mathematical Statistics, August 1996 Mosteller Statistician of the Year Award, February 2001 Tenth Most Cited Mathematical Scientist in the World 1991-2001, Science Watch President, International Society for Bayesian Analysis, 2006 Recipient, Parzen Prize, 2006

## PROFESSIONAL ACTIVITIES SINCE 1990 (EXCLUDING COLLOQUIUA GIVEN):

Invited Paper: Computer Science and Statistics Interface, E. Lansing, Michigan, 1990.

Presented Paper: 2nd World Congress of the Bernoulli Society and the Institute of Mathematical Statistics, Uppsala, Sweden, August 1990.

Conference Organizer: Bayesian Computation via Stochastic Simulation, Ohio State Univ., February 1991.

Invited Speaker: Pacific Northwest Statistics Group, Vancouver, March 1991.

Invited Speaker: Bayesian Statistics 4, Valencia, April, 1991.

Conference Chair: Fifth New England Statistics Symposium, April 1991.

Associate Editor: Journal American Statistical Association, January 1992 - 1995.

Organizing Committee: 24th Symposium on the Interface, College Station, Texas, March 1992.

Invited Paper: Sixth New England Statistics Symposium, April 1992.

Invited Speaker: 5th Purdue Symposium on Statistical Decision Theory and Related

Topics, June 1992.

Invited Lecturer: Workshop on "New Developments in Statistical Modelling for Complex Biomedical Problems", INSERM, Paris, July 1992. Invited Speaker: Annual Statistical Meetings, Boston, August 1992.

Invited Speaker: Latin American-US Workshop on Bayesian Statistics and Econometrics, Caracas, Venezuela, December 1992.

Member: ESF Network on Highly Structured Stochastic Systems, January 1993.

Conference Chair: Seventh New England Statistics Symposium, April 1993.

Invited Speaker: 1st Riverboat Conference, Basel, May 1993.

Invited Speaker: Statistical Society of Canada, Wolfville, June 1993.

Invited Speaker: Joint Statistical Meetings, San Francisco, August 1993.

Invited Speaker: International Conference on Hierarchical Modeling, Rio De Janiero, December 1993.

Invited Lecturer: University of Basel, Switzerland, May 1994

Invited Speaker: Bayesian Statistics 5, Alicante, Spain June 1994

Conference Organizer and Chair: Summer Research Conference, AMS-IMS-SIAM sponsored, Mt. Holyoke College, June 1994

Conference Co-Chair: NSF-CBMS Workshop on Finite Population Models, Storrs, CT July 1994

Invited Speaker: Workshop on Model Determination, Weisbaden, Germany, Sept 1994

Invited Speaker: Statistical Society of Ottawa, October 1994

Conference Chair: Ninth New England Statistics Symposium, April 1995.

Conference Organizing Committee: Workshop on Highly Structured Stochastic Systems, Luminy, France, June 1995.

Invited Speaker: International Workshop on Model Uncertainty and Model Robustness, Bath, England, June 1995.

Invited Speaker: Joint Statistical Meetings, Orlando, Florida, August 1995.

Invited Speaker: VI Latin American Congress on Probability and Mathematical Statistics,

Valparaiso, Chile, November, 1995

Invited Speaker: Sydney International Statistical Congress, Sydney, Australia, July 1996. Invited Speaker: Joint Statistical Meetings, Chicago, August 1996.

Associate Editor: American Statistician, 1996 - 2001.

IMS Representative to AAAS Section on Information, Computing and Communication, 1996-.

Member, International Advisory Committee, International Society for Bayesian Analysis, 1996-.

Member, NSF Review Panel in Statistics, December 1996.

Conference Chair: 11<sup>th</sup> New England Statistics Symposium, April 1997.

Invited Distinguished Scholar: National Chao Tung University, May 1997 (Lectures at Academia Sinica, Fu Jen Catholic University and Fung Shia University).

Invited Speaker: Practical Bayesian Statistics 4, Nottingham, England, July 1997.

Invited Speaker: International Workshop on Stochastic Model Building and Variable Selection Duke University, Durham, October 1997.

Invited Speaker: INFORMS, Dallas, October, 1997.

Member, NSF Review Panel In Statistics, December 1997.

Invited Speaker: Third Triennial Calcutta Symposium on Probability and Statistics, Calcutta, December 1997.

Invited Speaker: Conference on Recent Advances In Statistics and Probability, Calcutta, January, 1998.

Invited Speaker, ENAR (Biometrics Society) Meeting, Pittsburgh, March 1998.

Elected: Board of Directors, International Society for Bayesian Analysis 1998 - 2001.

Invited Speaker: Basel Biometrics Society, Basel Switzerland, May 1998.

Invited Speaker: Joint Statistical Meeting, Dallas, August 1998.

ASA Visiting Lecturer Program, 1999 -

Invited Speaker: Royal Statistical Society Meeting Sheffield, UK, April 1999

Conference Chair: 13<sup>th</sup> New England Statistics Symposium Storrs, CT April 1999 Invited Speaker: Statistical Methods for Analyzing Geographic Variations In Health Indicators, Workshop in Paris, April 1999

Invited Speaker: International Workshop On Objective Bayesian Methodology, Valencia, June 1999

Invited Speaker: Second Bayesian Nonparametrics Workshop, Reading, UK, July 1999

Invited Speaker: Joint Statistical Meetings, Baltimore, August 1999

Chair Elect: ASA Section on Bayesian Statistical Science, 2000

Invited Speaker: International Conference in Honor of the 80<sup>th</sup> birthday of Professor C.R. Rao, San Antonio, March 2000

Invited Speaker: ENAR Meeting, Chicago, March 2000

Invited Speaker: Basel Biometrics Society, Basel May 2000

Invited Speaker: ISBA Meeting, Crete May 2000

Invited Speaker: AMS-IMS-SIAM Summer Research Conference, S. Hadley, MA, July 2000

Invited Speaker: Joint Statistical Meetings, Indianapolis, August 2000

Member, NSF Review Panel in Statistics, December 2000

Invited Address: Boston Chapter of the American Statistical Association, February 2001

Invited Presentation, Symposium In Honor of Sir David Cox, New York, March 2001

Conference Chairman, 15<sup>th</sup> New England Statistics Symposium, Storrs, CT, April 2001

Invited Tutorial, International Real Estate Conference, Cancun, May 2001.

Invited Speaker, Bayesian Inference In Stochastic Processes, Varenna, Italy, June 2001

Invited Presentation, Basel Biometric Society, June 2001

Invited Speaker, Bayesian Nonparametrics Summit, Ann Arbor, July 2001

Special Invited Paper (IMS), Joint Statistical Meetings, Atlanta, August 2001

Associate Editor: Journal of the American Statistical Association, Theory and Methods, January 2002 -

Invited Participant, Bayesian Statistics 7, Tenerife, June 2002

Program Chair Elect: ISBA 2003

Invited Speaker, Joint Statistical Meetings, New York City, August 2002

Invited Speaker, and Tutorial, Stochastic Computation Workshop, SAMSI, September 2002, Durham, NC

Invited Speaker, Spatial Statistics: Integrating Statistics, GIS and Statistical Graphics, October 2002, Seattle, WA

Invited Speaker, Int'l Conference on Ranking and Selection, Multiple Comparisons, Reliability, and their applications, December 2003, Chennai, India

Invited Speaker, International Conference on Statistics In Industry and Business, January 2003 Cochin, India

Invited Speaker, International Bayesian Workshop/Symposium January 2003 Calcutta

Invited Speaker, Large Scale Models for Environmental Systems Workshop, SAMSI February 2003 Durham, North Carolina

Invited Speaker, Spatio-Temporal Statistics Summer Colloquium, June 2003, Boulder, Colorado

Invited Speaker, ISI International Conference on Environmental Statistics and Health, July 2003 Santiago de Compostela, Spain

Invited Speaker, International Workshop on Bayesian Analysis, August 2003, Santa Cruz, CA

Invited Presenter, Bayesian Case Studies Workshop 7, Carnegie Mellon University, Pittsburgh, September 2003

Invited Distinguished Lecturer, PRIMES Program, Colorado State University, Fort Collins, October 2003

Invited Speaker, New Approaches to Statistical Modeling of Ecological Data, Jackson Hole, November 2003

Invited Speaker, ISM Conference on Science of Modeling, Yokohama, Japan, December 2003

Co-leader SAMSI Program on Multi Scale Model Development and Control Design. January 2004 Invited Speaker, ENAR, Pittsburgh, March 2004

Co-organizer, NSF Summer Institute, Uncertainty and Variability in Ecological Inference Forecasting and Decision making, Duke University, June 2004

Member, Editorial Board, Environmental and Ecological Statistics, January 2004

Associate Editor, Bayesian Analysis, July 2004

Associate Editor, Environmental and Ecological Statistics, August 2004 -

Invited Speaker and Roundtable Leader, Joint Statistical Meetings, Toronto, August 2004

Invited Speaker, Winemiller Symposium, Columbia, MO October 2004

Plenary Speaker, MCMC-Ski, Bormio, Italy, January 2005

NIH Panelist, Obesity and the Built Environment, Durham, NC February 2005

External Evaluator, Department of Mathematics and Statistics, University of Massachusetts, Amherst, MA, April 2005

Keynote Speaker, Workshop on recent advances in modeling spatio-temporal data, Southampton, UK, May 2005

Keynote Speaker, Conference on Applied Statistics in Ireland, Enniskillen, Ireland, May 2005

Invited Speaker, Bayesian Inference In Stochastic Processes 4, Varenna, Italy, June 2005

Invited Speaker, Joint Statistical Meetings, Minneapolis, MN, August 2005

Member, National Institute of Statistical Science, Board of Trustees, 2005-2007

Keynote Speaker, Latent Structural Modelling and Analysis for Spatio-temporal Data, December, 2005, Kyoto, Japan

Invited Speaker, Workshop on Uncertainty in Ecological Analysis, Ohio State University, Columbus, OH, April 2006

Invited Address (as Parzen Prize Recipient), Texas A&M University, College Station, TX, April 2006

Invited Speaker, International Workshop on Applied Probability, University of Connecticut, Storrs, CT, May 2006

Invited Speaker, Bayesian Inference in Complex Stochastic Systems, Warwick University, UK, May 2006

Invited Speaker, Valencia 8 ISBA 2006 World Meeting on Bayesian Statistics, Benidorm Spain, June 2006

Invited Speaker, Spatial Data Methods for Environmental and Ecological Processes, Puglia, Italy, September 2006

Advisory Board Member, Institute for Mathematics Applied to the Geosciences, NCAR, Boulder CO, October, 2006 -

Invited Speaker, International Workshop on Statistical Modelling of Complex Systems, Munich, Germany, October, 2006

Invited Speaker, Workshop on Environmental Health and Statistics, University of Florida, Gainesville, January, 2007

Invited Speaker, Mathematical Challenges and Opportunities in Sensor Networking, Institute for Pure and Applied Mathematics, UCLA, January 2007

Plenary Speaker, Spatial and Spatio-temporal Statistics, University of Arkansas, Fayetteville, April 2007

Invited Speaker, Joint Statistical Meetings, Salt Lake City, August, 2007

Invited Speaker, International Society for Exposure Analysis, annual Meeting, Durham, North Carolina, October 2007

Invited Speaker, International Conference on Advances in Interdisciplinary Statistics and Combinatorics, UNC-Greensboro, October, 2007

Editor, Special Issue of Environmental and Ecological Statistics

Program Organizing Committee, SAMSI Program on Wireless Sensor Networks, Durham, Spring 2008

Invited Speaker, 9<sup>th</sup> Bayesian Statistics Brazilian Meeting, Maresias, Sao Paolo, February, 2008

Invited Speaker, ENAR meeting, Arlington, VA, March 2008

Invited Speaker, GUDO 4 Workshop, Valencia, Spain, June 2008

Invited Speaker, Joint Statistical Meetings, Denver, CO, August 2008

Invited Speaker, METMA 4, Alghero, Sardinia, September 2008

Invited Speaker, MCMC Meeting, CRM Lab, Sherbrooke, Quebec, October 2008

Invited Speaker, Thirtieth Anniversary, UFMG, Belo Horizonte, Brazil, May 2009

Invited Speaker, 7<sup>th</sup> Workshop on Bayesian Nonparametrics, Torino, Italy, June 2009

Invited Speaker, Joint Statistical Meetings, Washington, D.C., August 2009

Invited Speaker, Conference on Spatio-temporal Extremes and Applications, Lausanne, November, 2009

# **RECENT GRANTS:**

7/99 - 6/02	NSF - Methodology for Analyzing Spatial Data	\$157,000
12/99-11/02	NSF/EPA-Statistical Methods for Environmental Social Sciences	\$111,000
9/00-8/03	AHRQ-Understanding Variability in Community Mammography	\$240,000
4/01-3/04	NSF-Stochastic Modeling for Geographic Diversity of Plant Species Richness in South Africa (joint with Ecology and Evolutionary Biology)	\$220,000
6/01-5/04	NIH/NIEHS-Statistical Methods to Assess Environmental Justice	\$192,000
6/04-8/07	NIH-Bayesian Methods for Analyzing Genetic Diversity	\$174,000
6/04-8/07	NCI/NIH-Enhancing the Accuracy of Mammography Internation in the Community	pretation \$180,000
9/04-8/07	NIH/NIEHS-Duke Center for Geospatial Medicine	\$400,000
4/05-3/08	NIH/NIEHS-Optimal Spatial Design for Environmental Health Research	\$158,000

# CURRENT AND PENDING FUNDING:

# <u>Current</u>

2007-1545-01 Gelfand (PI) 12/15/2007-11/30/2008 0.5 Academic North Carolina State University \$45,549 0.5 Summer Multivariate space-time models and methods to combine large disparate spatial data and numerical models Role: PI

CNS-0540347-003 Clark (PI) 01/15/2006-12/31/2010 National Science Foundation \$102,198 Dynamic Sensor Networks-Enabling the Measurement, Modeling, and Prediction of Biophysical Change in a Landscape Role: Co-PI

DEB-0516198-003 Gelfand (PI) 09/01/2005-08/31/2009 National Science Foundation \$84,416 Collaborative QEIB Research: Spatio-temporal Modeling of Species Distributions and Biodiversity-Integrating Climate and Population Responses Role: PI

DMS-0504953-002 Gelfand (PI) 08/01/2005-07/31/2009 National Science Foundation \$14,712 Bayesian Nonparametric Methods for Spatial and Spatiotemporal Data Role: PI

5P30-ES011961-04 Digiulio (PI) 05/03/2004-03/31/2009 0.9 Academic National Institutes of Health \$33,502 0.3 Summer Center for Comparative Biology of Vulnerable Populations Role: Core Director

M6616283101 Gelfand, Alan (PI) 04/01/2006-02/28/2009 0.5 Academic University of Minnesota \$43,288 0.4 Summer Hierarchical Modeling Approaches for Geographical Boundary Analysis in Cancer Studies Role: PI

RD-83329301 Gelfand, Alan (PI) 05/01/2007-11/30/2012 1.35 Academic Environmental Protection Agency \$250,836 1.35 Summer Southern Center for Environmentally Driven Defects in Birth Outcomes GISSA Core Role: PI of subcontract

Gelfand (PI) 01/01/2009-12/31/2011 0.2 Summer University of Connecticut \$68,314 A Comprehensive Approach to the Forecasting of Potential Distributions of Invasive Plant Species Role: PI

AG032458 Reiter (PI) 06/01/2009-05/31/2011 0.2 Academic National Institutes of Health \$102,500 0.3 Summer Sharing Confidential Datasets With Geographic Identifiers Via Multiple Imputation Role: Co Investigator

CMG Collaborative Research, NSF, Fuentes (PI) 05/16/2009-05/15/2012 0.17 Summer North Carolina State University \$33,220 Multivariate nonstationary spatial extremes in climate and atmospherics Role: PI of subcontract

CCF-0940671 (Agarwal-PI) 09/01/2009-08/31/2013 1.33 Academic National Science Foundation \$254,873 **CDI-Type II: Integrating Algorithmic and Stochastic Modeling Techniques for Environmental Prediction** Role: Co-PI

## **RESEARCH INTERESTS:**

Spatial Statistics Modeling and Model Determination Nonparametric Bayesian Inference Bayesian Computation

## GRADUATE STUDENTS:

I have completed twenty six Ph.D. students since 1990, nearly all of whom have gone into academic positions including the University of Minnesota, Carnegie-Mellon University, Texas A & M University, University of Southampton, North Carolina State University, University of California, Santa Cruz, and University of Texas-Austin.

#### SHORT COURSES:

Graphical and Descriptive Methods for Criminal Justice Data: Washington, Philadelphia, San Francisco 1984; Houston, Chicago, New York 1985,

Markov Chain Monte Carlo Methodology: University of Basel, Switzerland, May 1994; Southern Illinois University, DeKalb, IL, April 1996; National Chao Tung University, Taiwan, May 1997.

Spatial Modeling and Data Analysis: University of Sao Paolo, January 2001, University of Padua, May 2001, University of Oulu, Finland, June 2002, University of Bocconi, Milan, November, 2002.

Short Course on Hierarchical Modeling For the Analysis of Spatal Data, ENAR, Pittsburgh, March 2004, Joint Statistical Meetings, Minneapolis, August 2005.

NSF Short Course on Hierarchical Modeling for the Environmental Sciences, Duke University, June 2004, 2006

Short Course on Spatial Epidemiotogy, Erasmus Summer Program, Erasmus University, Rotterdam, August 2004, 2005, 2006, 2007.

Short Course on Hierarchical Modeling for the Analysis of Spatial Data, Southampton, May 2005, May 2007, June 2009.

Short Course on Hierarchical Modeling for the Analysis of Spatial Data, Tokyo, December, 2005 Short Course on Applied Bayesian Nonparametric Modelling, Joint Statistical Meetings, Seattle, August, 2006 Short Course on Multivariate Spatial Process Modeling, ASA Section on Statistics and the Environment and CISES, Chicago, October 2006 Short Course on Hierarchical Modeling for the Analysis of Spatial Data, Zaragoza, Spain, June 2007, Lisbon, Portugal, March 2008, Valencia, Spain, June, 2008

PUBLICATIONS:

### **Books and Monographs:**

Gelfand, A.E. and C.C. Walker, 1984. <u>Ensemble Modeling: Inference from Small Scale</u> <u>Properties to Large Scale Systems.</u> Marcel Dekker: New York.

Gelfand, A.E. 1984. Editor: <u>Proceedings of the Second Workshop on Law and Justice</u> <u>Statistics</u>, Bureau of Justice Statistics, Washington, D.C.

Gelfand, A.E. 1987. Editor: <u>Contributions to the Theory and Application of Statistics</u>, <u>Academic Press</u>, San Francisco.

Gelfand, A.E. (with S. Banerjee and B.P. Carlin) 2004. <u>Hierarchical Modeling and</u> <u>Analysis for Spatial Data</u> Chapman Hall, Boca Raton.

Gelfand, A.E. (with Clark, J.S.) 2006. <u>Hierarchical Modeling for Environmental Data</u>; Some applications and Perspectives. Oxford University Press.

Gelfand, A.E. (with P. J. Diggle, M. Fuentes, P. Guttorp) 2010. <u>The Handbook of Spatial</u> <u>Statistics.</u> Chapman Hall (forthcoming)

### Journal Articles:

Gelfand, A.E. 1971. Seriation Methods for archaeological materials. <u>American Antiquity</u> <u>36 (3)</u>: 263-74.

Gelfand, A.E. 1971. Rapid seriation methods with archaeological applications. <u>Mathematics in the Archaeological and Historical Sciences.</u> Edinburgh University Press, pp. 186-201.

Gelfand, A.E. (with H. Solomon) 1973. A study of Poisson's models for jury verdicts in criminal and civil trials. J. Amer. Statist. Assoc. 68 (342): 271-78.

Gelfand, A.E. 1974. Rapid seriation methods for multivariate observations through similarities. <u>Commun. in Statist. 3 (</u>7): 635-45.

Gelfand, A.E. (with D.L. Thomas) 1974. Confidence coefficients for binomial interval estimates under hypergeometric models. <u>Amer. Statistician 28 (2)</u>: 52-56.

Gelfand, A.E. (with H. Solomon) 1974. Modeling jury verdicts for the American legal system. J. Amer. Statist. Assoc. 69 (345): 32-38.

Gelfand, A.E. (with H. Solomon) 1975. Analyzing the decision making process of the American jury. J. Amer. Statist. Assoc. 70 (350): 305-10.

Gelfand, A.E. 1976. A comparison of several attribute sampling plans. <u>Naval Res.</u> <u>Logistics Quart. 23</u> (3): 513-23.

Gelfand, A.E. (with D.L. Thomas) 1976. Discrimination between the binomial and hypergeometric models. <u>Commun. in Statist. 5 (3)</u>: 225-40.

Gelfand, A.E. (with C.C. Walker) 1977. The distribution of cycle lengths in a class of abstract systems. <u>Internat. J. General Syst.</u> 2 (4): 39-46.

Gelfand, A.E. (with H. Solomon) 1977. Considerations in building jury behavior models. *Jurimetrics Journal* 17 (4): 292-314.

Gelfand, A.E. 1977. Are 6-member juries really as good as 12-member juries? <u>Trial</u> <u>Magazine 13 (2)</u>: 41-43.

Gelfand, A.E. 1977. Toward characterizing Boolean transformations. <u>Proceedings of the</u> <u>Society for General Systems</u> <u>Research (February)</u>, pp. 111-16.

Gelfand, A.E. (with H. Solomon) 1977. Rejoinder to "On the Effect of Jury Size." <u>J. Amer.</u> <u>Statist. Assoc. 72 (359)</u>: 536-37.

Gelfand, A.E. (with H. Solomon) 1977. An argument in favor of 12-member juries. <u>Modeling the Criminal Justice System.</u> Sage Criminal Justice System Annals, Sage Publications (March), pp. 205-23.

Gelfand, A.E. (with C.C. Walker) 1978. Managing Complex Systems: An Application of Ensemble Methods in System Thoery. <u>Applied General Systems Research, Recent</u> <u>Developments and Trends</u>, G. Klir, ed. New York: Plenum Press. pp. 175-85.

Gelfand, A.E. (with C.C. Walker) 1978. A model for complex organization with applications to managerial strategy and advertising policy. <u>Proceedings of the Business and</u> <u>Economic Statistics Section.</u> 1978 ASA Meeting, pp. 232-36.

Gelfand, A.E. (with J.E. Davis) 1978. The jury list in Connecticut: Is the voter registration list truly representative? <u>Connecticut Bar Journal 52</u> (6): 449-74.

Gelfand, A.E. (with C.C. Walker) 1978. A system theoretic approach to the management of complex organizations: Management by exception, priority and input span in a class of fixed structure models. <u>Behavioral Science 24:</u> 112-20.

Gelfand, A.E. (with W.R. Stephenson) 1979. A model for precedential value of appellate court decisions. <u>Proceedings of the Social Statistics Section.</u> 1979 ASA Meeting, pp. 559-63.

Gelfand, A.E. 1980. Statistics in Archaeology. In: <u>Encyclopedia</u> of Statistical Sciences, Vol. I. John Wiley & Sons, Inc., pp. 118-22.

Gelfand, A.E. (with C.C. Walker) 1980. A system theoretic approach to the management of complex organizations: Management by consensus and its interaction with other management strategies. <u>Behavioral Science 25 (4)</u>: 250-60.

Gelfand, A.E. (with P. Shuchman) 1980. Can judges select cases of "No Precedential Value"? <u>Emory Law Review 29</u>: 193-228.

Gelfand, A.E. 1981. An estimation problem for Poisson processes. <u>Australian Journal of</u> <u>Statistics 23 (2)</u>: 1-8.

Gelfand, A.E. (with C.C. Walker) 1982. On the character of and distance between states in a binary switching net. <u>Biological Cybernetics 43:</u> 79-86.

Gelfand, A.E. 1982. A behavioral summary for completely random nets. <u>Bull. Math. Biol.-</u> <u>44</u>(3): 309-20.

Gelfand, A.E. (with P. Cattin and J. Danes) 1983. A simple Bayesian procedure for estimation in a conjoint model. J. of <u>Marketing Research</u>, Vol. XX, pp. 29-35.

Gelfand, A.E. 1983. Estimation in noncentral distributions. <u>Commun. in Statist. 12</u> (4): 463-475.

Gelfand, A.E. (with W.R. Stephenson) 1984. An examination of U.S. appellate court opinions. <u>Proceedings of the Second Workshop on Law and Justice Statistics.</u> Washington, D.C. pp. 37-45.

Gelfand, A.E. 1984. On attribute importance and relative market shares in conjoint analysis. <u>Proceedings of the Business and Economics Statistics Section</u>, 1984 ASA Meeting, pp. 243-248.

Gelfand, A.E. (with P. Cattin) 1985. A new non-metric conjoint method: some preliminary results. <u>Proceedings of the Association for Consumer Research.</u>

Gelfand, A.E. 1986. Review of "An Economic Analysis of Crime" by P. Schmidt and A. Witte, JASA 81 pp. 250-251.

Gelfand, A.E. 1986. Review of "Prediction in Criminology" by D.P. Farrington and R. Tarling, JASA 81 pp. 872-873.

Gelfand, A.E. 1987. Review of "Statistical Methods in Discrimination Litigation" by D.H.

Kaye and M. Aicken, Jurimetrics 27, 3 pp. 325-327.

Gelfand, A.E. 1987. Reconsidering Inference in Conjoint Analysis <u>Proceedings of ASA</u> <u>Business and Economics Section</u> pp. 135-141.

Gelfand, A.E. 1987. Mean Square Error Behavior for Prediction in Linear Regression, <u>Communications in Statistics 16 (6)</u> pp. 1717-1724.

Gelfand, A.E. 1987. Estimation in Parametric Mixture Families: In <u>Contributions to the</u> <u>Theory and Application of Statistics</u>, pp. 379-396.

Gelfand, A.E. 1988. Estimation of a Restricted Variance Ratio, <u>Proceedings of 2nd</u> <u>International Tampere Conference in</u> Statistics pp. 457-466.

Gelfand, A.E. (with D.K. Dey) 1988. On the Estimation of Variance Ratios, <u>Journal of</u> <u>Statistical Planning and Inference</u>. 19 pp. 121-131.

Gelfand, A.E. (with D.K. Dey) 1988. Improved Estimation of a Disturbance Variance, Journal of Econometrics, 39 pp. 387-395.

Gelfand, A.E. (with A. Das Gupta and D. K. Dey) 1988. A new admissibility theorem with applications to estimation of survival and hazard rates and means in the scale parameter family. <u>Sankhya, A</u> 50(2) pp. 269-281.

Gelfand, A.E. (with D.K. Dey) 1988. Improved Estimation of Variance Components in Mixed Models. <u>Commun. in Statistics A</u>, 17: pp. 3313-3331.

Gelfand, A.E. (with S. Leeds) 1989. Estimation for Dirichlet Mixed Models. <u>Naval</u> <u>Research Logistics Quart. 36 (2)</u> pp. 197-214.

Gelfand, A.E. (with B. Carlin) 1989. Approaches for Empirical Bayes Confidence Intervals for a Vector of Exponential Scale Parameters, <u>Computing Science and Statistics</u> <u>Interface</u> 1988 ASA, pp. 485-498.

Gelfand, A.E. (with D.K. Dey) 1990. Improved Estimation of a Patterned Covariance Matrix, *Journal of Multivariate Analysis*, Vol. 31, pp. 107-116.

Gelfand, A.E. (with S.R. Dalal) 1990. A note on Overdispersed Exponential Families, <u>Biometrika</u> 77, pp. 55-64.

Gelfand, A.E. (with B. Carlin) 1990. Approaches for Empirical Bayes Confidence Intervals, *Journal Amer. Stat. Assoc.* 85, pp. 105-114.

Gelfand, A.E. (with A.F.M. Smith) 1990. Sampling Based Approaches to Calculating Marginal Densities, <u>Journal Amer. Stat. Assoc.</u>, 85, 398-409. [Reprinted in "Breakthroughs in Statistics"].

Gelfand, A.E. (with S. Hills, A. Racine-Poon and A.F.M. Smith) 1990. Illustration of

Bayesian Inference in Normal Data Models Using Gibbs Sampling. <u>Journal Amer. Stat.</u> <u>Assoc.</u>, 85, 972-985.

Gelfand, A.E. (with B. Carlin) 1990. A Sample Reuse Method for Accurate Parametric Empirical Bayes Confidence Intervals, <u>Journal Royal Stat. Soc., Ser. B</u> 53, 189-200.

Gelfand, A.E. (with D.K. Dey) 1990. On measuring Bayesian robustness of contaminated classes of priors. <u>Statistics and Decisions</u> 9, 63-80.

Gelfand, A.E. (with A.F.M. Smith) 1991. Gibbs sampling for marginal posterior expectations. <u>Communications in Statistics, Theory and Methods</u>, 20 (5 and 6), 1747-1766.

Gelfand, A.E. (with L. Kuo) 1991. Nonparametric Bayesian bioassay including ordered polytomous response. <u>Biometrika</u>, 78, 657-666.

Gelfand, A.E. (with B. Carlin) 1991. An iterative Monte Carlo method for non conjugate Bayesian analysis. <u>Statistics and Computing</u> 1, 119-128.

Gelfand, A.E. (with J. Wakefield, A.F.M. Smith) 1992. Efficient computation of random variates via the ratio-of-uniforms method. <u>Statistics and Computing</u>, 1, 129-133.

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